

CLAIMS

1. A Fresnel lens sheet holding structure for holding a Fresnel lens sheet of 3 mm or below in thickness having an entrance surface provided with prisms of a triangular cross section each having an entrance facet and a total-reflection facet that reflects part or all of light fallen on the entrance facet in a total-reflection mode to deflect the light in a desired direction, said Fresnel lens sheet holding structure comprising:

a hanging member to be attached to the upper side of the Fresnel lens sheet, and

a support member for supporting the hanging member.

2. The Fresnel lens sheet holding structure according to claim 1 further comprising a tensioning member attached to at least the lower side of the Fresnel lens sheet.

3. The Fresnel lens sheet holding structure according to claim 2, wherein the tensioning member is pulled downward or laterally by an elastic member.

4. The Fresnel lens sheet holding structure according to claim 2, wherein a rigid sheet disposed adjacently to the exit surface of the Fresnel lens sheet is mounted on the tensioning member.

5. The Fresnel lens sheet holding structure according to claim 4, wherein joining planes in which the lower surfaces of parts of the hanging member corresponding to right and left end parts of the upper side of the Fresnel lens sheet and the upper surfaces of right and left end parts of the support member are joined are inclined such that a point specified by coordinates on the side of the end of the Fresnel lens sheet on the joining plane is at a level lower than that of a point specified by coordinates on the side of the center of the Fresnel lens sheet on the joining plane in a front elevation, and

joining planes in which the upper surfaces of parts of the tensioning member corresponding to right and left end parts of the lower side of the Fresnel lens sheet and the lower surfaces of parts of the rigid sheet mounted on the tensioning member corresponding to the right and the left end part are joined are inclined such that a point specified by coordinates on the side of end of the Fresnel lens sheet on the joining plane is at a level higher than that of a point specified by coordinates on

the side of the center of the Fresnel lens sheet on the joining plane in a front elevation.

6. The Fresnel lens sheet holding structure according to claim 4 or 5, wherein the rigid sheet is a lenticular lens sheet.

7. The Fresnel lens sheet holding structure according to any one of claims 1 to 6, wherein the Fresnel lens sheet has an exit surface provided with diffusing lenticular lenses.

8. The Fresnel lens sheet holding structure according to any one of claims 1 to 6, wherein the Fresnel lens sheet contains a dispersing agent that diffuses light.

9. The Fresnel lens sheet holding structure according to any one of claims 1 to 6, wherein the Fresnel lens sheet is colored to absorb light.

10. The Fresnel lens sheet holding structure according to any one of claims 1 to 6, wherein the Fresnel lens sheet has a light absorbing layer.

11. The Fresnel lens sheet holding structure according to any one of claims 1 to 10, wherein a low-reflection layer is formed on one of or both the surfaces of the Fresnel lens sheet.

12. A rear projection display provided with a transmission screen including the Fresnel lens sheet holding structure according to any one of claims 1 to 11.